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IN THE DRAWINGS

Please replace the previous Figure 1 with the attached Figure 1 (labeled replacement sheet). In the replacement sheet, Carousel App. 44 has been added, along with a line pointing from Info. D-Base 40 to Carousel App. 44, and from Carousel App. 44 to Mux 42.

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REMARKS

This response is intended as a full and complete response to the final Office Action mailed April 4, 2005. In the Office Action, the Examiner notes that claims 1-26 are pending and rejected. By this response, Applicants have amended claims 1, 14, 20 and 26, and added new claims 27-30. The amendments to the claims and the new claims are fully supported by the Specification. For example, the amendments to claims 1 and 14 are supported at least by page 5, line 28, to page 6, line 4. The amendment to claim 20 is to correct a clerical error. The amendments to claim 26 are supported at least by page 7, lines 4-12, and by page 9, lines 10-23. New claims 27 and 28 are supported at least by page 9, line 24, to page 10, line 5. New claim 29 is supported at least by page 5, lines 1-21. New claim 30 is supported at least by page 6, lines 8-9. Thus, no new matter has been added and the Examiner is respectfully requested to enter the amendments to the claims and newly added claims.

In view of the above amendments and the following discussion, Applicants submit that the claims pending in the application are believed to comply with the written description requirement, are not anticipated, and are non-obvious under the respective provisions of 35 U.S.C. §112, §102 and §103. Thus, Applicants believe that the application is in condition for allowance.

It is to be understood that Applicants, by amending the claims, do not acquiesce to the Examiner's characterizations of the art of record or to Applicants' subject matter recited in the pending claims. Further, Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant responsive amendments.

Priority

The Applicants respectfully submit that claims 1-25 and 29-30, as currently amended, are fully supported by U.S. Provisional Application No. 60/191,474, filed March 23, 2000, and should thus be accorded a priority date of March 23, 2000. Also, Claims 26-28 are fully supported by U.S. Provisional Application No. 60/179,736, filed February 2, 2000, and should thus be accorded a priority date of February 2, 2000.

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Amendments to the Specification and Drawings

The Specification has been amended to restore the paragraph beginning on page 6, line 23, to its originally filed form. This amendment is supported by the same paragraph of the Specification as originally filed. Figure 1 of the Drawings has also been amended to include Carousel App. 44, a line pointing from Info. D-Base 40 to Carousel App. 44, and a line pointing from Carousel App. 44 to Mux 42. This amendment is supported by the description in the paragraph beginning on page 6, line 23, of the Specification and by Figure 2 of U.S. Provisional Application No. 60/191,474, filed March 23, 2000. The amended Figure 1 also obviates the objection to the Drawings from the Office Action mailed on 8/26/04.

Objection to the Drawings

The Examiner has objected to the drawings as failing to comply with 37 CFR 1.83(a) because "the newly added limitations wherein the 'user demographic database [is] not accessible to said network headend and said distribution network' (Claims 1 and 14) as determined by a user input (Claim 26) must be shown or the feature(s) canceled form the claim(s)." Applicants have removed these features, as recited above, from claims 1, 14 and 26, and thus the objection based on these features, as recited above, is obviated.

New claim 29 recites (emphasis added below):

> "The system of claim 1, wherein <u>said user demographic database is adapted to be private to said terminal device and not shared with said network headend and said distribution network.</u>"

However, the limitation as recited in claim 26 is shown in Figure 1 as originally filed. For example, Figure 1 shows bit mask 30 (the user demographic database, see line 1 of page 5) isolated within set top box 16 and not having any connections to the network headend or the distribution network. Thus, that "<u>said user demographic database is adapted to be private to said terminal device and not shared with said network headend and said distribution network</u>" is shown in Figure 1. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

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35 U.S.C. §112 Rejection

Claim 26

The Examiner has rejected claim 26 under 35 U.S.C. §112 as failing to comply with the written description requirement. In particular, the Examiner alleges that the "claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, the examiner does not concur with applicant's argument that support for the limitation as to receiving 'input controlling whether or not the user demographic database is accessible by the network headend and the distribution network'."

The Applicants have deleted the rejected claim language from claim 26, and thus the Applicants respectfully request that the Examiner's rejection be withdrawn.

35 U.S.C. §102 Rejections

Claims 1, 14 and 26

The Examiner has rejected claims 1, 14 and 26 under 35 U.S.C. §102(e) as being anticipated by Sitnik (U.S. Patent 6,160,570, hereinafter "Sitnik). Applicants respectfully traverse the rejection.

Claims 1 and 14

Applicants' claim 1 recites (emphasis added below):

"1.   A system for transmitting information in a broadcast distribution system that is targeted to a system user, said system comprising:
   a)   a network headend for transmitting at least one information stream to a plurality of users, said information stream being comprised of a plurality of information selections and a plurality of corresponding codes, each said code identifying a characteristic of a corresponding one of said selections that is employed to identify a system user to whom additional information related to said selection should be transmitted;
   b)   a distribution network for transmitting said information stream with said codes; and
   c)   a plurality of terminal devices interfaced to said distribution network for receiving said information stream, each said terminal device including a terminal processor and a user demographic database that contains demographic information about a corresponding user of said terminal device, said <u>terminal processor being programmed to compare each code for each selection in said information stream with said</u>

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demographic information in said database, and determine therefrom whether said user is designated to receive said additional information related to said selection."

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). The Sitnik reference fails to disclose each and every element of the claimed invention, as arranged in the claim.

Specifically, the Sitnik reference fails to teach or suggest at least the "terminal processor being programmed to compare each code for each selection in said information stream with said demographic information in said database, and determine therefrom whether said user is designated to receive said additional information related to said selection" as recited in the claim.

The Sitnik reference discloses a digital television system in which "[a] controller receives video data corresponding to at least two alternative images" (Abstract). The Sitnik reference discloses:

> "In brief, the editing module 32 receives or compiles a user profile for the digital television receiver 2, stores that profile in a memory, such as the non-volatile storage 22, selects one of the alternative images provided to the CPU 19 by the demultiplexer 10, and causes the display processor 12 to display the selected alternative image within a video sequence (e.g., a television program) output to the display screen 14." (column 7, lines 31-37);

The Sitnik reference also discloses:

> "Thereafter, step S303 receives, from the demultiplexer 10, data packets containing alternative images for display within a video sequence, and decodes video data in these packets if necessary. Next, step S304 selects one of the alternative images for display based on information in the user profile and based on information in the data packet corresponding to the selected image." (column 8, lines 21-27)

Thus, the Sitnik reference selects and displays an alternative image within a video sequence based on information in a user profile and in a data packet associated with the selected image. However, the Sitnik reference does not teach or suggest that

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information in the data packet is used to determine if the user is designated to receive additional information related to the selected image. By contrast, the present invention comprises a terminal processor which determines whether the user is designated to receive <u>additional information related to an information selection</u> by comparing a code corresponding to the information selection with information in a user demographic database.

As such, Applicants submit that claim 1 is not anticipated and fully satisfies the requirements of 35 U.S.C. §102 and is patentable thereunder. Moreover, claim 14 contains substantially similar limitations as those discussed above in regards to claim 1. Therefore, claim 14 also is not anticipated and fully satisfies the requirements of 35 U.S.C. §102 and is patentable thereunder. Therefore, Applicants respectfully request that the Examiner's rejection of claims 1 and 14 be withdrawn.

<u>Claim 26</u>

Applicants' claim 26 recites (emphasis added below):

> "26.   A system for transmitting information in a broadcast distribution system, the system comprising:
>   a)   a network headend for transmitting at least one digital information stream to a plurality of users, the digital information stream comprising a plurality of advertisements and at least one code corresponding to each advertisement, <u>each of the plurality of advertisements comprising a continuous stream of I-frames for a predetermined amount of time at the beginning and end of each advertisement;</u>
>   b)   a distribution network for transmitting the digital information stream; and
>   c)   a plurality of terminal devices interfaced to the distribution network for receiving the digital information stream, each terminal device including a terminal processor and a user demographic database that contains demographic information about a user of the terminal device, the terminal processor being programmed to compare each code for each advertisement with the demographic information in said database and determine therefrom which of the plurality of advertisements the user is designated to receive."

As discussed above, the Sitnik reference discloses a digital television system.

However, the Sitnik reference fails to disclose <u>each and every element</u> of the claimed invention, <u>as arranged</u> in the claim.

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Specifically, the Sitnik reference fails to teach or suggest at least a digital information stream comprising a plurality of advertisements, "each of the plurality of advertisements comprising a continuous stream of I-frames for a predetermined amount of time at the beginning and end of each advertisement", as recited in the claim.

As such, Applicants submit that claim 26 is not anticipated and fully satisfies the requirements of 35 U.S.C. §102 and is patentable thereunder. Therefore, Applicants respectfully request that the Examiner's rejection of claim 26 be withdrawn.

Claims 1-4, 7-12, 14-17, 20-23 and 25

The Examiner has rejected claims 1-4, 7-12, 14-17 and 20-23 and 25 under 35 U.S.C. §102(b) as being anticipated by Wachob (U.S. Patent No. 5,155,591, hereinafter "Wachob"). The rejection is respectfully traversed.

Applicants' claim 1 recites (emphasis added below):

> "1.   A system for transmitting information in a broadcast distribution system that is targeted to a system user, said system comprising:
>   a)   a network headend for transmitting at least one information stream to a plurality of users, said information stream being comprised of a plurality of information selections and a plurality of corresponding codes, each said code identifying a characteristic of a corresponding one of said selections that is employed to identify a system user to whom additional information related to said selection should be transmitted;
>   b)   a distribution network for transmitting said information stream with said codes; and
>   c)   a plurality of terminal devices interfaced to said distribution network for receiving said information stream, each said terminal device including a terminal processor and a user demographic database that contains demographic information about a corresponding user of said terminal device, said terminal processor being programmed to compare each code for each selection in said information stream with said demographic information in said database, and determine therefrom whether said user is designated to receive said additional information related to said selection."

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ

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481, 485 (Fed. Cir. 1984) (citing <u>Connell v. Sears, Roebuck & Co.</u>, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). The Wachob reference fails to disclose <u>each and every element</u> of the claimed invention, <u>as arranged</u> in the claim.

Specifically, the Wachob reference fails to teach or suggest at least the <u>"terminal processor being programmed to compare each code for each selection in said information stream with said demographic information in said database, and determine therefrom whether said user is designated to receive said additional information related to said selection"</u> as recited in the claim.

Wachob discloses that "[d]ifferent commercial messages are broadcast to different demographically targeted audiences in a cable television system or the like" (Abstract). Wachob discloses (emphasis added below):

> "Once converter 10 has been alerted that a commercial message break is imminent, it <u>identifies the demographic characteristics of the current viewer from data stored in RAM</u> 36. The converter software stored in ROM 32 then <u>initiates an automatic channel change</u> during a vertical blanking interval <u>to the specific commercial message channel to which the demographic characteristics correspond.</u>" (column 6, lines 47-54)

Thus, the Wachob reference performs a channel change to a different commercial message corresponding to the demographic characteristics of the current viewer. However, the Wachob reference does not teach or suggest a terminal processor which determines whether the user is designated to receive <u>additional information related to an information selection</u> by comparing a code corresponding to the information selection with information in a user demographic database.

Therefore, Wachob fails to disclose each and every element of the claimed invention, as arranged in Applicants' independent Claim 1. Thus, Claim 1 is not anticipated by Wachob and is patentable under 35 U.S.C. §102. Moreover, Claim 14 includes relevant limitations similar to those discussed above in regards to Claim 1. Therefore Claim 14 is also not anticipated by Wachob and is patentable under 35 U.S.C. §102. Furthermore, claims 2-4, 7-12, 15-17 and 20-23 and 25 depend, either directly or indirectly, from independent claims 1 and 14 and recite additional limitations thereof. As such and at least for the same reasons as discussed above, these

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dependent claims are also not anticipated by Wachob and are patentable under 35
U.S.C. §102.

35 U.S.C. §103(a) Rejection
Claims 5, 6, 18 and 19

The Examiner has rejected claims 5, 6, 18 and 19 under 35 U.S.C. §103(a) as
being unpatentable over Wachob in view of Ngo et al. (U.S. Patent No. 6,574,793,
hereinafter "Ngo").

The test under 35 U.S.C. §103 is not whether an improvement or a use set forth
in a patent would have been obvious or non-obvious; rather the test is whether the
claimed invention, considered as a whole, would have been obvious. Jones v. Hardy,
110 USPQ 1021, 1024 (Fed. Cir. 1984) (emphasis added). Moreover, the invention as
a whole is not restricted to the specific subject matter claimed, but also embraces its
properties and the problem it solves. In re Wright, 6 USPQ 2d 1959, 1961 (Fed. Cir.
1988) (emphasis added). The combination of the Wachob and Ngo references fails to
teach or suggest the Applicants' invention as a whole.

Specifically, the Wachob and Ngo references alone or in combination fail to
teach or suggest at least the "terminal processor being programmed to compare each
code for each selection in said information stream with said demographic information in
said database, and determine therefrom whether said user is designated to receive said
additional information related to said selection" as recited in the claim.

Claim 1 is patentable over the Wachob reference for at least the reasons as
discussed above.

The Ngo reference fails to bridge the substantial gap between the Wachob
reference and the present invention as recited in claim 1. The Ngo reference discloses
a method and system for displaying advertisements. In particular, the Ngo reference
discloses (emphasis added below):

> "The advertisements may also be targeted to viewers based
> on information about the viewers. For example, an application or
> program in the set top box 38 may be used to select which
> advertisement is displayed to a viewer based on a viewer's
> personal profile." (column 6, lines 55-59)

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The Ngo reference also discloses (emphasis added below):

> "The advertisements may also include links to other information such as detailed information about the advertised product, purchasing information and the like. For example, if after viewing an advertisement, the viewer wants to obtain additional information about an advertised product, the viewer may select an option listed in a menu which immediately directs the viewer to a new commercial or information piece providing additional information on the product." (column 6, ines 31-38)

Thus, the Ngo reference discloses an application program in a set top box selects an advertisement to be displayed based on a viewer's profile, and that the advertisements may have links to other information. However, the Ngo reference does not teach or suggest that the application program determines whether or not to display the links to the other information based on the viewer's profile. By contrast, the present invention comprises a terminal processor which determines whether the user is designated to receive additional information related to an information selection by comparing a code corresponding to the information selection with information in a user demographic database. For example, the system of the present invention is capable of broadcasting advertisements to all viewers, but only providing additional information to demographically pertinent users. The combination of the Wachob and Ngo references is not capable of such.

Thus, Wachob and Ngo, either singly or in any operable combination, fail to teach or suggest Applicants' claimed invention as a whole. Thus, Claim 1 is patentable over Wachob and Ngo. Moreover, since Claim 14 includes relevant limitations similar to those discussed above with respect to Claim 1, Claim 14 is also patentable over Ngo in view of Bryant. Furthermore, Claims 5, 6, 18 and 19 depend directly or indirectly from independent Claims 1 and 14 and recite additional features thereof. As such and for at least the same reasons as discussed above, these dependent claims are also patentable over Wachob in view of Ngo.

Claims 13 and 24

The Examiner has rejected claims 13 and 24 as being obvious and unpatentable over Wachob in view of Bryant et al. (U. S. Patent No. 5,652,615, hereinafter "Bryant")

under the provisions of 35 U.S.C. §103(a). Applicants respectfully traverse the
rejection.

The combination of the Wachob and Bryant references fails to teach or suggest
the Applicants' invention as a whole.

Specifically, the Wachob and Bryant references alone or in combination fail to
teach or suggest at least the "terminal processor being programmed to compare each
code for each selection in said information stream with said demographic information in
said database, and determine therefrom whether said user is designated to receive said
additional information related to said selection" as recited in the claim.

Claim 1 is patentable over the Wachob reference for at least the reasons as
discussed above.

The Bryant reference fails to bridge the substantial gap between the Wachob
reference and the present invention as recited in claim 1. The Bryant reference
discloses that "[i]n a broadcasting network, programs are distributed to targeted
customer premises equipment," and that program "segments are transported over the
network to the customer premises equipment. While being transported, the segments
are selectively merged to form the program" (Astract). The Bryant reference also
discloses:

> "The invention, in part, provides for the precise broadcasting of
> composite programs to targeted audiences. This requires that the base
> program content, e.g., the movie, the sports-cast, etc., is decoupled from
> the program fill, e.g., advertisements, public notices, stations breaks,
> video text overlays, private data, and so forth. Then, each target
> audience, while viewing the same base program, can be exposed to
> tailored fill material during program breaks, the fill material especially
> designed to appeal to the various target audiences based on their diverse
> demographics." (column 4, lines 10-19)

Thus, the Bryant reference discloses that program fill is tailored based on
demographics. However, the Bryant reference does not teach or suggest a system
which decides whether or not the target audience is designated to receive additional
information related to the program fill based on demographic information. By contrast,
the present invention comprises a terminal processor which determines whether the
user is designated to receive additional information related to an information selection

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by comparing a code corresponding to the information selection with information in a user demographic database.

Thus, Wachob and Bryant, either singly or in any operable combination, fail to teach or suggest Applicants' claimed invention as a whole. Thus, Claim 1 is patentable over Wachob and Bryant. Moreover, since Claim 14 includes relevant limitations similar to those discussed above in regards to Claim 1, Claim 14 is also patentable over Wachob in view of Bryant. Furthermore, Claims 13 and 24 depend directly or indirectly from independent Claims 1 and 14 and recite additional features thereof. As such and for at least the same reasons as discussed above, these dependent claims are also patentable over Wachob in view of Bryant.

Official Notices

The Office Action takes Official Notice on page 12 that allegedly "the particular usage of a 'database' locatable at a headend is notoriously well known in the art." Applicant hereby traverses the Official Notice, and submits that the limitations taught by claims 6 and 19 may not be well know within the specific art of the present invention as recited in the independent claims from which claims 6 and 19 depend. For example, the allegedly well known limitations may not be well known to be used in combination with the "terminal processor being programmed to compare each code for each selection in said information stream with said demographic information in said database, and determine therefrom whether said user is designated to receive said additional information related to said selection" as recited in claim 1.

New Claims

New claims 27-30 are patentable because they depend, directly or indirectly, on claims 1 and 26, which are patentable at least for the reasons given above.

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CONCLUSION

Thus, Applicants submit that all the claims pending in the application are in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it s requested that the Examiner telephone Eamon J. Wall, Esq. at (732) 530-9404 so appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

_1/6/05_

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